

ABSTRACT OF THE DISCLOSURE

A system, apparatus, and method for improving CD uniformity in lithographic system is presented herein. The system includes an exposure apparatus configured to expose substrates, a track apparatus that is operatively coupled to the exposure apparatus and a plurality of processing modules and apparatus. The system also includes a measuring device configured to measure attributes of the exposed and processed substrates and to assess whether the exposed and processed substrate attributes are uniform based on pre-specified substrate profile information. The system further includes a module configured to adaptively calculate corrective exposure data based on the measured attributes upon determining that said attributes are not uniform. The corrective exposure data is configured to correct for non-uniformities in the substrates by regulating the exposure dosage of the exposure apparatus. Once the substrates are assessed to achieve the desired uniformity, the substrates are exposed by the exposure apparatus in accordance with the corrective exposure data, the uniformity of the exposed substrate continues to be monitored and the dose corrections are updated as required to maintain uniformity.